

PEOPLEon theMOVE

Human Resources reports the following personnel changes:

Key Personnel Assignments

Richard Whitlock was selected as manager, Engineering Cost/Resource Analysis Office, Systems Management Office.

Michael Hess was selected as chief, Neutral Buoyancy Laboratory Office, Mission Operations Directorate.

Irene Verinder was named chief, Manufacturing, Materials, and Process Technology Division, Engineering Directorate.

Elena Huffstetler was named deputy chief, Avionics Systems Division, Engineering Directorate.

Additions to the Workforce

Lee Berlin joins the Legal Office as a law clerk.

Jessica Verduzco joins the Projects Procurement Office, Office of Procurement, as a contract specialist.

Christopher Schad joins the Robotics Operations Branch, EVA, Robotics, and Crew Systems Operations Division, Mission Operations Directorate, as a space station mechanical and robotics systems instructor.

Kerry Fleiger-Holmes joins the Laptop Production and Development Branch, Flight Avionics Division, Mission Operations Directorate, as a computer engineer.

Aaron Brown and *Nicholas Richardson* join the Orbit Dynamics Branch, Flight Design and Dynamics Division, Mission Operations Directorate, as mission design and analysis engineers.

Angela Braun joins the Ascent/Descent Dynamics Branch, Flight Design and Dynamics Division, Mission Operations Directorate, as a mission design and analysis engineer.

Gregory Smith joins the Operations Division, Mission Operations Directorate, as a lead flight controller.

Antonio DeVera joins the Systems Training Branch, Space Flight Training Division, Mission Operations Directorate, as a space station systems engineer.

Leena Joshi joins the Environmental Systems Branch, Systems Division, Mission Operations Directorate, as a space systems operations engineer.

Brian Derkowski joins the Advanced Development Office, Engineering Directorate, as an aerospace flight systems engineer.

Nathan Howard joins the Dynamic Systems Test Branch, Automation, Robotics, and Simulation Division, Engineering Directorate, as an experimental facilities development engineer.

Brian Daniel and *Matthew McCurdy* join the Life Support and Habitability Systems Branch, Crew and Thermal Systems Division, Engineering Directorate, as aerospace engineers.

Warren Ruemmele joins the Thermal Systems and Engineering Support Branch, Crew and Thermal Systems Division, Engineering Directorate, as an environmental control systems engineer.

Candice Howard and *Kristopher Lee* join the Propulsion and Fluids Systems Branch, Energy Systems Division, Engineering Directorate, as aerospace engineers.

Keith Beckman joins the Materials and Processes Technology Branch, Manufacturing, Materials, and Process Technology Division, Engineering Directorate, as a materials engineer.

Kevin Dries joins the Manufacturing Integration and Technology Branch, Manufacturing, Materials, and Process Technology Division, Engineering Directorate, as a materials engineer.

Chris Lamoreaux and *Benjamin Quasius* join the Structural Mechanics Design/Analysis Branch, Structures and Mechanics Division, Engineering Directorate, as aerospace engineers.

Daniel Newswander joins the Thermal Branch, Structures and Mechanics Division, Engineering Directorate, as an aerospace engineer.

Deneen Taylor joins the Structures and Dynamics Branch, Structures and Mechanics Division, Engineering Directorate, as an aerospace engineer.

Greg Dorth joins the RSA Integration Office, Program Integration Office, International Space Station Program, as an aerospace engineer.

Mary Burke and *Samuel Russell* join the Propulsion Test Office, White Sands Test Facility, as aerospace engineers.

Lindsay Keller joins the Planetary Science Branch, Earth Science and Solar Systems Exploration Division, Space and Life Sciences Directorate, as a space scientist.

James Logan joins the Medical Sciences Division, Space and Life Sciences Directorate, as an aerospace medical officer.

Lara Kearney joins the EVA Project Office, as an EVA hardware project manager.

Promotions

Rose Herrera was selected as a contract specialist in the Procurement Policy and Systems Office, Office of Procurement.

Dahlia Coy was selected as lead secretary in the Institutional Resources Management Office, Office of the Chief Financial Officer.

Karen Black was selected as senior secretary in the Space Operations Management Office.

Lisa Wilson was selected as the supply group lead in the Supply and Support Services Branch, Logistics Division, Center Operations Directorate.

Reassignments to Other Centers

David Samuels moves to Dryden Flight Research Center.

Jim Graves moves to Marshall Space Flight Center.

Todd May moves to Marshall Space Flight Center.

Lisa Roberts moves to Marshall Space Flight Center.

Brian Mitchell moves to Marshall Space Flight Center.

Dave Herbek moves to NASA Headquarters.

Reassignments to Other Directorates

Al Conde moves from the ISO 9000 Office to the Engineering Directorate.

Sam Daugherty moves from the Engineering Office, White Sands Test Facility to the International Space Station Program.

Phil Dempsey moves from the Engineering Directorate to the International Space Station Program.

Kelle Pido moves from the Technology Transfer and Commercialization Office to the International Space Station Program.

Ted Ro moves from the Mission Operations Directorate to the International Space Station Program.

Joe Aquino moves from the Mission Operations Directorate to the Space Operations Management Office.

Retirements

Albert Crews of the Flight Crew Operations Directorate

Aldo Bordano of the Engineering Directorate

Dallas Ives of the Engineering Directorate

Resignations

Camille Wilson of the Public Affairs Office

Michael Janas of the Flight Crew Operations Directorate

Mark Gibb of the Mission Operations Directorate

Don Allison of the Engineering Directorate

Scott Lazaroff of the Engineering Directorate

Richard Malecki of the Space Shuttle Program

Mary Kincaid of the Office of Procurement

Judy Parnell of the International Space Station Program

Karen Lucht of the White Sands Test Facility

NASA BRIEFS

AGREEMENT GIVES BIOTECH RESEARCH A NEW DIMENSION

NASA has entered into a groundbreaking agreement with the private sector to explore a new frontier in biotechnology, focusing on infectious disease research and developing a liver-assist device for patients in need of transplant surgery.

Inspired by a news article on NASA's efforts to commercialize space activities, H. Fisk Johnson, Ph.D., president of Wisconsin-based, private venture capital company Fisk Ventures, Inc., approached the Agency about a partnership which culminated in an agreement to develop commercial medical products using NASA's Bioreactor technology.

"This is a great deal for the American people," said NASA Administrator Daniel S. Goldin. "It's a symbol of the success that can be achieved when government, private industry and academia work together on the exploration of new frontiers for scientific, technological and economic growth."

Goldin and Johnson signed the agreement on September 14 in a ceremony at the U.S. Capitol.

"Some of the best minds from NASA and our group collaborated over three years, conducting an extensive analysis to determine what was technically possible and the most likely to succeed in the market," Johnson explained. "This led us to NASA's ability to conduct research on cell cultures in the microgravity environment of space, and its unique cell-culture technology on the ground, that bridges the gap between what you can do in the traditional lab and what you can do in a space-based lab."

NASA invented the rotating Bioreactor as a way to study the impact of microgravity on cellular growth both here on Earth and in space. Traditional cell-growth research often produces single-cell, pancake-like cultures. The Bioreactor works by spinning a fluid medium filled with cells. The spinning motion neutralizes most of gravity's effects, creating a near-weightless environment that allows cells to grow more freely, in a three-dimensional manner.

FVI and In Vitro Technologies, Inc. of Maryland have formed a joint venture to turn this market-driven model into a scientific and commercial success. The new venture — StelSys, based in Baltimore, MD — will focus on commercializing microgravity research specifically in areas related to biological systems.

"NASA's Bioreactor technology is simply a tool box, and if you give a tool box to the right people, they can build a house," said Goldin. "We believe we've put this tool box in the right hands of the right people."

CHANDRA VERIFIES UNEXPECTED BLACK HOLE DISCOVERY

There's new evidence the universe is home to a type of black hole that's not too large and not too small. As black holes go, it's a middleweight that may represent the missing link between its flyweight relatives and the super-heavyweight variety found at the center of most galaxies.

Using NASA's Chandra X-ray Observatory, several groups of scientists have zeroed in on a mid-mass black hole located about 600 light years from the center of galaxy M82. "This opens a whole new field of research," said Martin Ward of the University of Leicester, England, a lead author involved with the observations. "No one was sure that such black holes existed, especially outside the centers of galaxies."

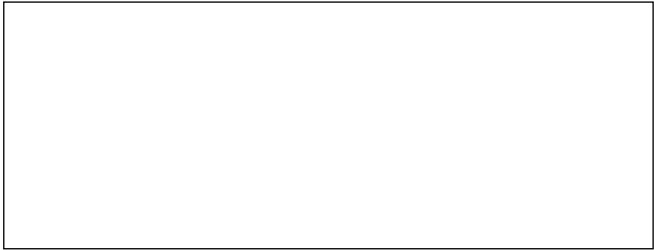
The M82 galaxy got its name nearly 220 years ago when it became the 82nd entry in a systematic catalog of nebulae and star clusters compiled by French astronomer Charles Messier.

The black hole found in M82 packs the mass of at least 500 suns into a region about the size of the Moon. Such a black hole would require extreme conditions for its creation, such as the collapse of a "hyperstar" or the merger of scores of black holes.

Images associated with this story are available at:

<http://chandra.harvard.edu>

<http://chandra.nasa.gov>



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